



496949

SITE HEALTH AND SAFETY PLAN (HASP)-FORM 1

Prepared by: Ben Maradkel

W.O. Number:
126340010040038

Date: 2/28/01

Project Identification

Office: Chicago
 Site Name: Morgan Site
 Client: U.S. EPA
 Work Location Address: 4801 S. Morgan
 Chicago, IL

Site History: The site has been cited several times for improper disposal. A pool of oil was identified by DOE inspector during inspection.

Scope of Work:

Oversight and soil sampling.

☐ Sites visit only; site HASP not necessary. List personnel here and sign off below:

Regulatory Status:

Site regulatory status:

CERCLA/SARA RCRA Other Federal Agency

X U.S. EPA ☐ U.S. EPA ☐ DOE
☐ State ☐ State ☐ USACE
☐ NPL Site **NRC** ☐ Air Force
 X OSHA ☐ 10 CFR 20 ☐ _____
 X Hazard Communication (Req'd See Attachment D)
 X 1910 X 1926 ☐ State

Safety Officer Manual (Required to be On-Site)

Based on the Hazard Assessment and Regulatory Status, determine the Standard HASP(s) applicable to this project. Indicate below which Standard HASP will be used and append the appropriate pages of this form along with the Standard Plan.

☐ Stack Test ☐ _____
☐ Air Emissions ☐ _____
☐ Asbestos ☐ _____
☐ Industrial Hygiene ☐ _____
☐ _____ ☐ _____

Review and Approval Documentation:

Reviewed by:
SO/DSM/CHS

Ron Bugg
 Name (Print)

Signature

Date: 3/6/01

Other

Name (Print)

Signature

Date: _____

Approved by:
Project Manager

Ron Bugg
 Name (Print)

Signature

Date: 3/6/01

Hazard Assessment and Equipment Selection:

In accordance with WESTON's Personal Protective Equipment Program and 29 CFR 1910.132, at the site prior to personnel beginning work, the SHSC and/or the Site Manager have evaluated conditions and verified that the personal protective equipment selection outlined within this HASP is appropriate for the hazards known or expected to exist. (Refer to Safety Officer Manual Section 2, Personal Protection Program, for guidance.)

X SHSC Ben Maradkel

Date

Name (Print)

Signature

Project start date: 3/12/01

This site HASP **must be reissued/reapproved** for any activities conducted after:

Amendment date(s) By:

End date: 3/12/01

Date: 3/12/01

1.
2.
3.
4.
5.

REVISED 02/1998 WESTON REPRESENTATIVES-FORM 2

Organization/Branch	Name/Title	Address	Telephone
Chicago Office	Ron Bugg/ Project Manager	70 W. Madison Chicago, IL 60602	312/424-3305
Chicago Office	Ben Maradkel/ SHSC	70 W. Madison Chicago, IL 60602	312/424-3314

Roles and Responsibilities:

START will be collecting soil samples and conducting oversight. START will package, label and ship samples.

WESTON SUBCONTRACTORS

Organization/Branch	Name/Title	Address	Telephone
RW Collins CO.	Tom Cook	7225 W 66 th Street Chicago, IL 60638	708/ 458-6868

Roles and Responsibilities:

Excavation to a depth of 10-15 feet. Rubber tired backhoe will be used.

SITE-SPECIFIC HEALTH AND SAFETY PERSONNEL

The Site Health and Safety Coordinator (SHSC) for activities to be conducted at this site is Ben Maradkel

The SHSC has total responsibility for ensuring that the provisions of this Site HASP are adequate and implemented in the field.

Changing field conditions may require decisions to be made concerning adequate protection programs. Therefore, the personnel assigned as SHSCs are experienced and meet the additional training requirements specified by OSHA in 29 CFR 1910.120.

Qualifications:

40-hour, 8-hour refresher, SHSC certificate, Blood borne, First Aid/ CPR

Designated alternates include: Ron Bugg

HEALTH AND SAFETY EVALUATION-FORM 3

Hazard Assessment

Background Review: ☒ Complete ☐ Partial If partial why?

Activities Covered Under This Plan:

No.	Task/Subtask	Description	Schedule
1		oversight	
2		Soil sampling	
3		Test Pits Excavation	

Types of Hazards:

1 Numbers refer to one of the following hazard evaluation forms. Complete hazard evaluation forms for each appropriate hazard class.

Physiochemical 1 <input type="checkbox"/> Flammable <input type="checkbox"/> Explosive <input type="checkbox"/> Corrosive <input type="checkbox"/> Reactive <input type="checkbox"/> O ₂ Rich <input type="checkbox"/> O ₂ Deficient	Chemically Toxic 1 <input checked="" type="checkbox"/> Inhalation <input type="checkbox"/> Carcinogen <input checked="" type="checkbox"/> Ingestion <input type="checkbox"/> Mutagen <input checked="" type="checkbox"/> Contact <input type="checkbox"/> Teratogen <input type="checkbox"/> Absorption <input type="checkbox"/> OSHA 1910.1000 Substance (Air Contaminants) <input type="checkbox"/> OSHA Specific Hazard Substance Standard (Refer to following page for listing)	Radiation 3 Ionizing: <input type="checkbox"/> Internal exposure <input type="checkbox"/> External exposure Non-ionizing: <input type="checkbox"/> UV <input type="checkbox"/> IR <input type="checkbox"/> RF <input type="checkbox"/> MicroW <input type="checkbox"/> Laser	Biological 2 <input checked="" type="checkbox"/> Etiological Agent <input checked="" type="checkbox"/> Other (plant, insect, animal) X Physical Hazards 4 <input checked="" type="checkbox"/> Construction Activities
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Source/Location of Contaminants and Hazardous Substances:

Directly Related to Tasks <input type="checkbox"/> Air <input type="checkbox"/> Other Surface <input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Surface Water <input type="checkbox"/> Sanitary Wastewater <input type="checkbox"/> Process Wastewater Other	Indirectly Related to Tasks — Nearby Process(es) That Could Affect Team Members: <input type="checkbox"/> Client Facility/WESTON Work Location <input type="checkbox"/> Nearby Non-Client Facility Describe: <input type="checkbox"/> Have activities (task[s]) been coordinated with facility?
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HEALTH AND SAFETY EVALUATION-CHEMICAL HAZARDS OF CONCERN-FORM 4

☐ N/A

Chemical Contaminants of Concern

Provide the data requested for chemical contaminants on HASP Form 25 or attach data sheets from an acceptable source such as NIOSH pocket guide, condensed chemical dictionary, ACGIH TLV booklet, etc. List chemicals and concentrations below and locate data sheets in Attachment B of this HASP.

☐ N/A

Identify hazardous materials used or on-site and attach Material Safety Data Sheets (MSDSs) for all reagent type chemicals, solutions, or other identified materials that in normal use in performing tasks related to this project could produce hazardous substances. Ensure that all subcontractors and other parties working nearby are informed of the presence of these chemicals and the location of the MSDSs. Obtain from subcontractors and other parties, lists of the hazardous materials they use or have on-site and identify location of the MSDSs here. List chemicals and quantities below and locate MSDSs in Attachment B of this HASP.

Chemical Name	Concentration (if known)	Chemical Name	Quantity
Heavy Metals	Unknown	Alconox	
VOC's	Unknown	Fuel (Diesel)	

OSHA-SPECIFIC HAZARDOUS SUBSTANCES

The following substances may require specific medical, training, or monitoring based on concentration or evaluation of risk. See the appropriate citation listed under 29 CFR 1910 or 1926 for additional information.

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> 1910.1001 Asbestos | <input type="checkbox"/> 1910.1002 Coal tar pitch volatiles | <input type="checkbox"/> 1910.1003 4-Nitrobiphenyl, etc. | <input type="checkbox"/> 1910.1004 alpha-Naphthylamine |
| <input type="checkbox"/> 1910.1005 [Reserved] | <input type="checkbox"/> 1910.1006 Methyl chloromethyl ether | <input type="checkbox"/> 1910.1007 3,3'-Dichlorobenzidine (and its salts) | <input type="checkbox"/> 1910.1008 bis-Chloromethyl ether |
| <input type="checkbox"/> 1910.1009 beta-Naphthylamine | <input type="checkbox"/> 1910.1010 Benzidine | <input type="checkbox"/> 1910.1011 4-Aminodiphenyl | <input type="checkbox"/> 1910.1012 Ethyleneimine |
| <input type="checkbox"/> 1910.1013 beta-Propiolactone | <input type="checkbox"/> 1910.1014 2-Acetylaminofluorene | <input type="checkbox"/> 1910.1015 4-Dimethylaminoazobenzene | <input type="checkbox"/> 1910.1016 N-Nitrosodimethylamine |
| <input type="checkbox"/> 1910.1017 Vinyl chloride | <input type="checkbox"/> 1910.1018 Inorganic arsenic | <input type="checkbox"/> 1910.1025 Lead (Att. FLD# 46) | <input type="checkbox"/> 1910.1027 Cadmium |
| <input type="checkbox"/> 1910.1028 Benzene | <input type="checkbox"/> 1910.1029 Coke oven emissions | <input type="checkbox"/> 1910.1043 Cotton dust | <input type="checkbox"/> 1910.1044 1,2-Dibromo-3-chloropropane |
| <input type="checkbox"/> 1910.1045 Acrylonitrile | <input type="checkbox"/> 1910.1047 Ethylene oxide | <input type="checkbox"/> 1910.1048 Formaldehyde | <input type="checkbox"/> 1910.1050 Methylenedianiline |
| <input type="checkbox"/> 1910.1051 1,3 Butadiene | <input type="checkbox"/> 1910.1052 Methylene chloride | | |

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HEALTH AND SAFETY EVALUATION-2 BIOLOGICAL HAZARDS OF CONCERN-FORM 5

☐ **Poisonous Plants (FLD 43)**

Location/Task No(s):

Source: ☐ Known ☐ Suspect
 Route of Exposure: ☐ Inhalation ☐ Ingestion
☐ Contact ☐ Direct Penetration

Team Member(s) Allergic: ☐ Yes ☐ No
 Immunization required: ☐ Yes ☐ No

☐ **Insects (FLD 43)**

Location/Task No(s):

Source: ☐ Known ☐ Suspect
 Route of Exposure: ☐ Inhalation ☐ Ingestion
☐ Contact ☐ Direct Penetration

Team Member(s) Allergic: ☐ Yes ☐ No
 Immunization required: ☐ Yes ☐ No

☐ **Snakes, Reptiles (FLD 43)**

Location/Task No(s):

Source: ☐ Known ☐ Suspect
 Route of Exposure: ☐ Inhalation ☐ Ingestion
☐ Contact ☐ Direct Penetration

Team Member(s) Allergic: ☐ Yes ☐ No
 Immunization required: ☐ Yes ☐ No

☒ **Animals (FLD 43)**

Location/Task No(s): ALL

Source: ☐ Known ☒ Suspect
 Route of Exposure: ☐ Inhalation ☐ Ingestion
☒ Contact ☐ Direct Penetration

Team Member(s) Allergic: ☐ Yes ☒ No
 Immunization required: ☐ Yes ☒ No

FLD 43 — WESTON Biohazard Field Operating Procedures: Att. OP ☐

☐ **Sewage**

Location/Task No(s):

Source: ☐ Known ☐ Suspect
 Route of Exposure: ☐ Inhalation ☐ Ingestion
☐ Contact ☐ Direct Penetration

Team Member(s) Allergic: ☐ Yes ☐ No
 Immunization required: ☐ Yes ☐ No

Tetanus Vaccination within Past 10 yrs: ☐ Yes ☐ No

☒ **Etiologic Agents (List)**

Location/Task No(s):

Source: ☐ Known ☒ Suspect
 Route of Exposure: ☐ Inhalation ☐ Ingestion
☒ Contact ☐ Direct Penetration

Team Member(s) Allergic: ☐ Yes ☒ No
 Immunization required: ☐ Yes ☒ No

FLD 44 — WESTON Bloodborne Pathogens Exposure Control Plan – First Aid Procedures: Att. OP ☐

FLD 45 — WESTON Bloodborne Pathogens Exposure Control Plan – Working with Infectious Waste: Att. OP ☐

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HEALTH AND SAFETY EVALUATION-4 PHYSICAL HAZARDS OF CONCERN-FORM 7

Phy. Haz. Cond.	Physical Hazard	Attach OP	WESTON OP Titles
oud noise	Hearing loss/disruption of communication	X	FLD01 - Noise Protection
lement weather	Rain/humidity/cold/ice/snow/lightning	<input type="checkbox"/>	FLD02 - Inclement Weather
eam heat stress	Burns/displaced oxygen/wet working surfaces	<input type="checkbox"/>	FLD03 - Hot Process - Steam
eat stress	Burns/hot surfaces/low pressure steam	<input type="checkbox"/>	FLD04 - Hot Process - LT3
mbient heat stress	Heat rash/cramps/exhaustion/heat stroke	<input type="checkbox"/>	FLD05 - Heat Stress Prevention/Monitoring
old stress	Hypothermia/frostbite	X	FLD06 - Cold Stress
old/wet	Trench/paddy/immersion foot/edema	X	FLD07 - Wet Feet
onfined spaces	Falls/burns/drowning/engulfment/electrocution	<input type="checkbox"/>	FLD08 - Confined Space Entry
xplosive vapors	Thermal burns/impaction/dismemberment	<input type="checkbox"/>	FLD09 - Hot Work
proper lifting	Back strain/abdomen/arm/leg muscle/joint injury	<input type="checkbox"/>	FLD10 - Manual Lifting/Handling Heavy Objects
even surfaces	Vehicle accidents/slips/trips/falls	X	FLD11 - Rough Terrain
or housekeeping	Slips/trips/falls/punctures/cuts/fires	X	FLD12 - Housekeeping
ructural integrity	Crushing/overhead hazards/compromised floors	<input type="checkbox"/>	FLD13 - Structural Integrity
ostile persons	Bodily injury	<input type="checkbox"/>	FLD14 - Site Security
emote area	Slips/trips/falls/back strain/communication	X	FLD15 - Remote Area
proper cyl. handling	Mechanical injury/fire/explosion/suffocation	<input type="checkbox"/>	FLD16 - Pressure Systems - Compressed Gases
ater hazards	Poor visibility/entanglement/drowning/cold stress	<input type="checkbox"/>	FLD17 - Diving
ater hazards	Drowning/heat/cold stress/hypothermia/falls	<input type="checkbox"/>	FLD18 - Operation and Use of Boats
ater hazards	Drowning/frostbite/hypothermia/falls/electrocution	<input type="checkbox"/>	FLD19 - Working Over Water
ehicle hazards	Struck by vehicle/collision	X	FLD20 - Traffic
xplosions	Explosion/fire/thermal burns	X	FLD21 - Explosives
oving mechanical parts	Crushing/pinch points/overhead hazards/electrocution	X	FLD22 - Heavy Equipment Operation
oving mech. parts	Overhead hazards/electrocution	<input type="checkbox"/>	FLD23 - Cranes/Lifting Equipment Operation
orking at elevation	Overhead hazards/falls/electrocution	<input type="checkbox"/>	FLD24 - Aerial Lifts/Manlifts
orking at elevation	Overhead hazards/falls/electrocution	<input type="checkbox"/>	FLD25 - Working at Elevation
orking at elevation	Overhead hazards/falls/electrocution/slips	<input type="checkbox"/>	FLD26 - Ladders
orking at elevation	Slips/trips/falls/overhead hazards	<input type="checkbox"/>	FLD27 - Scaffolding
trench cave-in	Crushing/falling/overhead hazards/suffocation	X	FLD28 - Excavating/Trenching
proper material handling	Back injury/crushing from load shifts	X	FLD29 - Materials Handling
ysiochemical	Explosions/fires from oxidizing, flam./corr. material	<input type="checkbox"/>	FLD30 - Hazardous Materials Use/Storage
ysiochemical	Fire and explosion	<input type="checkbox"/>	FLD31 - Fire Prevention/Response Plan Required
ysiochemical	Fire	X	FLD32 - Fire Extinguishers Required
ructural integrity	Overhead/electrocution/slips/trips/falls/fire	<input type="checkbox"/>	FLD33 - Demolition
lectrical	Electrocution/shock/thermal burns	<input type="checkbox"/>	FLD34 - Utilities
lectrical	Electrocution/shock/thermal burns	X	FLD35 - Electrical Safety
urns/fires	Heat stress/fires/burns	<input type="checkbox"/>	FLD36 - Welding/Cutting/Burning
npact/thermal	Thermal burns/high pressure impaction/heat stress	<input type="checkbox"/>	FLD37 - High Pressure Washers
npaction/electrical	Smashing body parts/pinching/cuts/electrocution	<input type="checkbox"/>	FLD38 - Hand and Power Tools
oor visibility	Slips/trips/falls	<input type="checkbox"/>	FLD39 - Illumination
ire/explosion	Burns/impaction	<input type="checkbox"/>	FLD40 - Storage Tank Removal/Decommissioning
ommunications	Disruption of communications	<input type="checkbox"/>	FLD41 - Std. Hand/Emergency Signals
nergy/release	Unexpected release of energy	<input type="checkbox"/>	FLD42 - Lockout/Tagout
ogging/ground clearing/grubbing activities	Operations associated with felling/moving of trees/brush/logs	<input type="checkbox"/>	FLD47 - Clearing, Grubbing, and Logging Operations
rilling hazards	Electrocution/overhead hazards/pinch points	<input type="checkbox"/>	1.6 - Drilling Safety Guide

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TASK-BY-TASK RISK ASSESSMENT-FORM 8

(COMPLETE ONE SHEET FOR EACH TASK)

TASK DESCRIPTION

2. Soil Sampling
3. Excavation of Testpits w/ Excavater

EQUIPMENT REQUIRED/USED

(Be specific, e.g., hand tools, heavy equipment, instruments, PPE)

Modified D PPE, scoper and jar for soil sampling, sub contrator will use a backhoe to excavate.

POTENTIAL HAZARDS/RISKS

Chemical

☒ Hazard Present
What justifies risk level?
Suspect, No history

Risk Level: ☐ H ☐ M ☒ L

Physical

☒ Hazard Present
What justifies risk level?
Excavating, potential for slip/trip/falls, cold weather

Risk Level: ☐ H ☒ M ☐ L

Biological

☒ Hazard Present
What justifies risk level?
Out doors. Potential for animals being present. Contaminated soil.

Risk Level: ☐ H ☐ M ☒ L

RADIOLOGICAL

☐ Hazard Present
What justifies risk level?

Risk Level: ☐ H ☐ M ☐ L

LEVELS OF PROTECTION/JUSTIFICATION

Modified Level D

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

WESTON FLD/ SOP on Site

[Back to Top](#)**PERSONNEL PROTECTION PLAN-FORM 9****Engineering Controls**

Describe Engineering Controls used as part of Personnel Protection Plan:

Task(s)

- | | |
|---|-----|
| 1 | N/A |
| 2 | N/A |
| 3 | N/A |

Administrative Controls

Describe Administrative Controls used as part of Personnel Protection Plan:

Task(s)

- | | |
|---|-----------------------------------|
| 1 | Limit time in the Exclusion Zone. |
| 2 | Limit time in the Exclusion Zone. |
| 3 | Limit time in the Exclusion Zone. |

Personal Protective Equipment

Action Levels for Changing Levels of Protection. Refer to HASP Form 13, Site Air Monitoring Program—Action Levels. Define Action Levels for up or down grade for each task:

Task(s)

- | | |
|---|------------------|
| 1 | Modified Level D |
| 2 | Modified Level D |
| 3 | Modified Level D |
- Should site conditions indicate that Modified Level D protection is not adequate all work will stop and site conditions and personal protection will be reevaluated.

DESCRIPTION OF LEVELS OF PROTECTION**Level D****Task(s):**

- ☒ Head
- ☒ Eye and Face
- ☒ Hearing
- ☐ Arms and Legs Only
- ☐ Appropriate Work Uniform
- ☒ Hand - Gloves
- ☒ Foot - Safety Boots
- ☐ Fall Protection
- ☐ Flotation
- ☐ Other

Level D Modified**Task(s):**

- ☒ Head
- ☒ Eye and Face
- ☒ Hearing
- ☐ Arms and Legs Only
- ☐ Whole Body
- ☐ Apron
- ☒ Hand - Gloves
- ☒ Gloves Nitrile
- ☐ Gloves
- ☒ Foot - Safety Boots
- ☒ Over Boots Nitrile

SITE OR PROJECT HAZARD MONITORING PROGRAM-FORM 11

Air Monitoring Instruments

Instrument Selection and Initial Check Record

Reporting Format: ☒ Field Notebook ☐ Field Data Sheets* ☐ Air Monitoring Log ☐ Trip Report ☐ Other

Instrument	Task No.(s)	Number Required	Number Received	Checked Upon Receipt	Comment	Initials
<input type="checkbox"/> CGI				<input type="checkbox"/>		
<input type="checkbox"/> O ₂				<input type="checkbox"/>		
<input type="checkbox"/> CGI/O ₂				<input type="checkbox"/>		
<input type="checkbox"/> CGI/O ₂ /tox-PPM, H ₂ S, H ₂ S/CO				<input type="checkbox"/>		
<input type="checkbox"/> RAD				<input type="checkbox"/>		
<input type="checkbox"/> GM (Pancake)				<input type="checkbox"/>		
<input type="checkbox"/> NaI (Micro R)				<input type="checkbox"/>		
<input type="checkbox"/> ZnS (Alpha Scintillator)				<input type="checkbox"/>		
<input type="checkbox"/> Other _____				<input type="checkbox"/>		
<input type="checkbox"/> PID				<input type="checkbox"/>		
<input type="checkbox"/> HNu 10.2				<input type="checkbox"/>		
<input type="checkbox"/> HNu 11.7				<input type="checkbox"/>		
<input type="checkbox"/> Photovac, TMA				<input type="checkbox"/>		
<input type="checkbox"/> OVM				<input type="checkbox"/>		
<input type="checkbox"/> Other _____				<input type="checkbox"/>		
<input type="checkbox"/> FID				<input type="checkbox"/>		
<input type="checkbox"/> Fox 128				<input type="checkbox"/>		
<input type="checkbox"/> Heath, AID, Other				<input type="checkbox"/>		
<input type="checkbox"/> RAM, Mini-RAM, Other _____				<input type="checkbox"/>		
<input type="checkbox"/> Monitox				<input type="checkbox"/>		
Specify: _____				<input type="checkbox"/>		
<input type="checkbox"/> Personal Sampling				<input type="checkbox"/>		
Specify: _____				<input type="checkbox"/>		
<input type="checkbox"/> Bio-Aerosol Monitor				<input type="checkbox"/>		
<input type="checkbox"/> Pump - MSA, Dräger, Sensidyne				<input type="checkbox"/>		
<input type="checkbox"/> Tubes/type: _____				<input type="checkbox"/>		
<input type="checkbox"/> Tubes/type: _____				<input type="checkbox"/>		
<input checked="" type="checkbox"/> Other <u>Multi Rae, TVA, XRF</u>	1,2,3			<input type="checkbox"/>		

*Refer to Attachment E.

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SITE OR PROJECT HAZARD MONITORING PROGRAM-FORM 12

Air Monitoring Instruments Calibration Record									
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[illegible]

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SITE AIR MONITORING PROGRAM-FORM 13

Action Levels

These Action Levels, if not defined by regulation, are some percent (usually 50%) of the applicable PEL/TLV/REL. That number must also be adjusted to account for instrument response factors.

	Tasks	Action Level		Action
<input type="checkbox"/> Explosive atmosphere		Ambient Air Concentration	Confined Space Concentration	
		<10% LEL	0 to 1% LEL	Work may continue. Consider toxicity potential.
		10 to 25% LEL	1 to 10% LEL	Work may continue. Increase monitoring frequency.
		>25% LEL	>10% LEL	Work must stop. Ventilate area before returning.
<input type="checkbox"/> Oxygen		Ambient Air Concentration	Confined Space Concentration	
		<19.5% O ₂	<19.5% O ₂	Leave area. Re-enter only with self-contained breathing apparatus.
		19.5% to 25% O ₂	19.5% to 23.5% O ₂	Work may continue. Investigate changes from 21%.
		>25% O ₂	>23.5% O ₂	Work must stop. Ventilate area before returning.
<input type="checkbox"/> Radiation		< 3 times background 3 times background to < 1 mR/hour		Continue work. Radiation above background levels (normally 0.01-0.02 mR/hr) signifies possible radiation source(s) present. Continue investigation with caution. Perform thorough monitoring. Consult with a Health Physicist.
		> 1 mrem/hour		Potential radiation hazard. Evacuate site. Continue investigation only upon the advice of Health Physicist.
X Organic gases and vapors	1,2,3	Depends on Chemical W/ Multi Rae D- C- ½ PEL/TLV of unknown chemical		Consult reference manuals for air concentration vs. PEL/TLV and toxicity data.
X Inorganic gases, vapors, and particulates				

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CONTINGENCIES-FORM 14

Emergency Contacts and Phone Numbers

Agency	Contact	Phone Number
Local Medical Emergency Facility (LMF)	St. Patrick Family Hospital	773/ 523-9550
WESTON Medical Emergency Contact	EMR - Dr. Elyane Theriault	1-800-229-3674
WESTON Health and Safety	Corporate Health and Safety Ron Bugg/ START H&S Manager	(610) 701-3000 312/ 424-3305
Fire Department	911	911
Police Department	911	911
On-Site Coordinator- SHSC	Ben Maradkel	312/ 424-3314
Client Site Contact	Steve Faryan	312 / 353-9351
Site Telephone	TBD	TBD
Nearest Telephone	TBD	TBD

Local Medical Emergency Facility(s)

Name of Hospital: St. Patrick Family Hospital

Address: 3344 S. Halsted St., Chicago, IL 60608

Phone No.:
773/ 523-9550

Name of Contact:

Phone No.:

Type of Service:

- ☐ Physical trauma only
☐ Chemical exposure only
☒ Physical trauma and chemical exposure
☒ Available 24 hours

Route to Hospital (written detail):
Figure 1 (next page)

Travel time from site:
7 min.
Distance to hospital:
2.1 miles
Name/no. of 24-hr ambulance service:
/

Secondary or Specialty Service Provider

Name of Hospital:

Address:

Phone No.:

Name of Contact:

Phone No.:

Type of Service:

- ☐ Physical trauma only
☐ Chemical exposure only
☐ Physical trauma and chemical exposure
☐ Available 24 hours

Route to Hospital (written detail):

Travel time from site:

Distance to hospital:

Name/no. of 24-hr ambulance service:
/

Figure 1. Route to Hospital

(Draw map to hospital here if space permits or attach on next sheet.)

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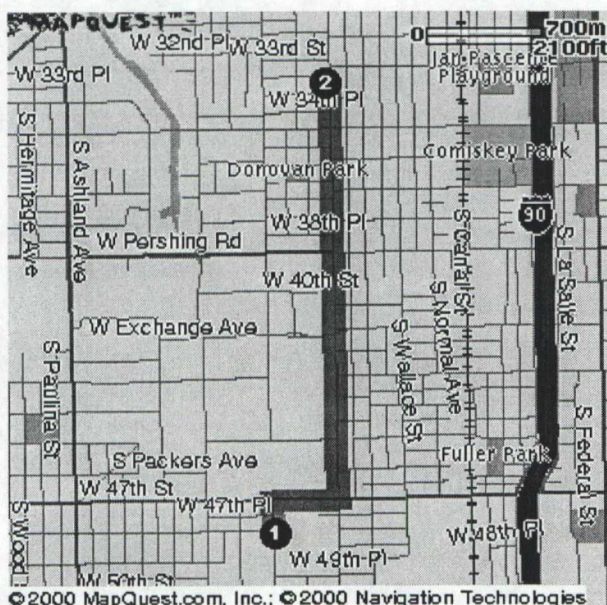
Create My Locations - Sign In

Yahoo! Yellow Pages

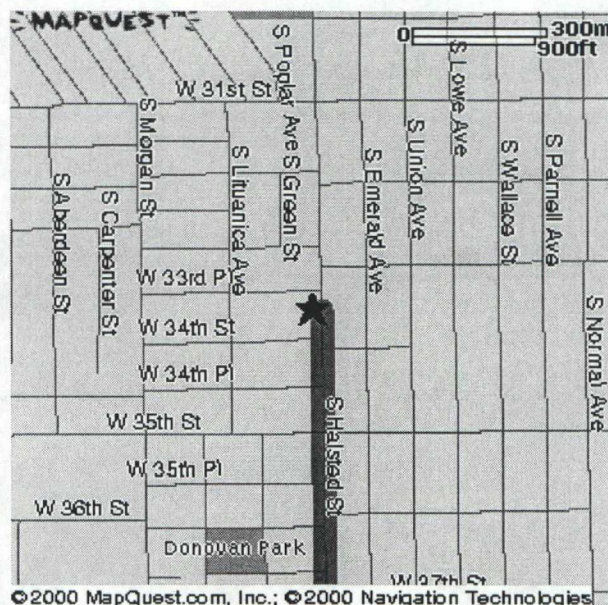
· Email Directions

- Get Reverse Directions

Approximate Travel Time: 7 mins



Full Route



Destination

Miles

1. Start out going North on **S MORGAN ST** towards **W 48TH ST** by turning right. 0.1
2. Turn **RIGHT** onto **W 47TH ST**. 0.2
3. Turn **LEFT** onto **S HALSTED ST**. 1.7

Like any driving directions/map, you should always do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

New Location

- ## 1 Enter a starting address or select from My Locations

- ## 2 Enter a destination address or select from My Locations

CONTINGENCIES-FORM 16

Response Plans

Medical - General Provide first aid, if trained; assess and determine need for further medical assistance. Transport or arrange for transport after appropriate decontamination.	First Aid Kit: YES	Type A	Location Vehicle	Special First-Aid Procedures: Cyanides on-site <input type="checkbox"/> Yes X No If yes, contact LMF. Do they have antidote kit? <input type="checkbox"/> Yes X No
	Eyewash required X Yes <input type="checkbox"/> No	Type	Location First aid kit/ vehicle	HF on-site <input type="checkbox"/> Yes X No If yes, need neutralizing ointment for first-aid kit. Contact LMF.
	Shower required <input type="checkbox"/> Yes X No	Type	Location	

Plan for Response to N/A Spill/Release In the event of a spill or release, ensure safety, assess situation, and perform containment and control measures, as appropriate.	Plan for Response to Fire/Explosion N/A In the event of a fire or explosion, ensure personal safety, assess situation, and perform containment and control measures, as appropriate:	Fire Extinguishers Type/Location / / / / / / /
a. Cleanup per MSDSs if small; or sound alarm, call for assistance, notify Emergency Coordinator b. Evacuate to pre-determined safe place c. Account for personnel d. Determine if team can respond safely e. Mobilize per Site Spill Response Plan	a. Sound alarm and call for assistance, notify Emergency Coordinator b. Evacuate to predetermined safe place c. Account for personnel d. Use fire extinguisher <u>only if safe and trained</u> in its use e. Stand by to inform emergency responders of materials and conditions	

Description of Spill Response Gear	Location	Description (Other Fire Response Equipment)	Location
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>

Plan to Respond to Security Problems

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DECONTAMINATION PLAN-FORM 17

Personnel Decontamination

Consistent with the levels of protection required, step-by-step procedures for personnel decontamination for each level of protection are attached.

Levels of Protection Required for Decontamination Personnel

The levels of protection required for personnel assisting with decontamination will be:

☐

Level B

☐

Level C

X Level D

Modifications include:

Nitrile boots, Nitrile gloves

Disposition of Decontamination Wastes

Provide a description of waste disposition, including identification of storage area, hauler, and final disposal site, if applicable:

If contamination is not detected, the material will be considered non-hazards and discarded as such. If the material is determined to be hazards waste the material will be labeled as such & left on site W/ OSC approval.

Equipment Decontamination

A procedure for decontamination steps required for non-sampling equipment and heavy machinery follows:

Subcontractor-

The Excavator will be dry decon for soil condition. If the material is in liquid form (drums other container detected). The bucket will be decon (wet w/ soap (alconox))

Sampling Equipment Decontamination

Sampling equipment will be decontaminated in accordance with the following procedure:

The sampling equipment- plastic sampling spoon will be used at each location and then discarded.

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LEVEL D/MODIFIED LEVEL D DECONTAMINATION PLAN-FORM 18

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
----------	---

- | | |
|--|--|
| <input type="checkbox"/> Segregated equipment drop | |
| <input type="checkbox"/> Boot cover and glove wash | |
| <input type="checkbox"/> Boot cover and glove rinse | |
| <input type="checkbox"/> Tape removal - outer glove and boot | |
| <input type="checkbox"/> Boot cover removal | |
| <input type="checkbox"/> Outer glove removal | |

HOTLINE

- | | |
|---|--|
| <input type="checkbox"/> Suit/safety boot wash | |
| <input type="checkbox"/> Suit/boot/glove rinse | |
| <input type="checkbox"/> Safety boot removal | |
| <input type="checkbox"/> Suit removal | |
| <input type="checkbox"/> Inner glove wash | |
| <input type="checkbox"/> Inner glove rinse | |
| <input type="checkbox"/> Inner glove removal | |
| <input type="checkbox"/> Inner clothing removal | |

CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Field wash | |
| <input type="checkbox"/> Redress | |

Disposal Plan, End of Day:

Disposal Plan, End of Week:

Disposal Plan, End of Project:

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SITE PERSONNEL AND CERTIFICATION STATUS-FORM 21

WESTON

Name: Ben Maradkel Title: Site Lead/ SHSC Task(s): Oversight/ Sampling Certification Level or Description: C-T <input checked="" type="checkbox"/> Medical Current <input checked="" type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input checked="" type="checkbox"/> Fit Test Current (Quant.)	Name: Ron Bugg Title: Project Manager Task(s): Oversight/ Sampling Certification Level or Description: B-S <input checked="" type="checkbox"/> Medical Current <input checked="" type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input checked="" type="checkbox"/> Fit Test Current (Quant.)
Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)	Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)
Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)	Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)
Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)	Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)
Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)	Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)
Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)	Name: Title: Task(s): Certification Level or Description: <input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)

TRAINING CURRENT - Training: All personnel, including visitors, entering the exclusion or contamination reduction zones must have certifications of completion of training in accordance with OSHA 29 CFR 1910, 29 CFR 1926, or 29 CFR 1910.120.

FIT TEST CURRENT - Respirator Fit Testing: All persons, including visitors, entering any area requiring the use or potential use of any negative pressure respirator must have had, as a minimum, a qualitative fit test, administered in accordance with OSHA 29 CFR 1910.134 or ANSI, within the last 12 months. If site conditions require the use of a full-face, negative-pressure, air-purifying respirator for protection from asbestos or lead, employees must have had a qualitative fit test, administered according to OSHA 29 CFR 1910.1001 or 1025/1926, within the last 6 months.

MEDICAL CURRENT - Medical Monitoring Requirements: All personnel, including visitors, entering the exclusion or contamination reduction zones must be certified as medically fit to work and to wear a respirator, if appropriate, in accordance with 29 CFR 1910, 29 CFR 1926/1910, or 29 CFR 1910.120.

The Site Health and Safety Coordinator is responsible for verifying all certifications and fit tests.

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SITE PERSONNEL AND CERTIFICATION STATUS-FORM 22

Subcontractor's Health and Safety Program Evaluation

Name of Subcontractor: RW Collins CO.

Activities To Be Conducted by Subcontractor: Excavating

Evaluation Criteria

<p>Medical program meets OSHA/WESTON criteria</p> <p><input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments:</p>	<p>Personal protective equipment available</p> <p><input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments:</p>	<p>On-site monitoring equipment available, calibrated, and operated properly</p> <p><input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments: N/A</p>
<p>Safe working procedures clearly specified</p> <p><input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments:</p>	<p>Training meets OSHA/WESTON criteria</p> <p><input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments:</p>	<p>Emergency procedures</p> <p><input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments:</p>
<p>Decontamination procedures</p> <p><input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments:</p>	<p>General health and safety program evaluation</p> <p><input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable</p> <p>Comments:</p>	<p>Additional comments:</p> <p><input checked="" type="checkbox"/> Subcontractor has agreed to and will conform with the WESTON HASP for this project.</p> <p><input type="checkbox"/> Subcontractor will work under his own HASP, which has been accepted by project PM.</p>

Evaluation Conducted by:

Date:

Subcontractor

<p>Name:</p> <p>Title:</p> <p>Task(s):</p> <p>Certification Level or Description:</p> <p><input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)</p>	<p>Name:</p> <p>Title:</p> <p>Task(s):</p> <p>Certification Level or Description:</p> <p><input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)</p>
<p>Name:</p> <p>Title:</p> <p>Task(s):</p> <p>Certification Level or Description:</p> <p><input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)</p>	<p>Name:</p> <p>Title:</p> <p>Task(s):</p> <p>Certification Level or Description:</p> <p><input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)</p>
<p>Name:</p> <p>Title:</p> <p>Task(s):</p> <p>Certification Level or Description:</p> <p><input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)</p>	<p>Name:</p> <p>Title:</p> <p>Task(s):</p> <p>Certification Level or Description:</p> <p><input type="checkbox"/> Medical Current <input type="checkbox"/> Training Current <input type="checkbox"/> Fit Test Current (Qual.) <input type="checkbox"/> Fit Test Current (Quant.)</p>

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HEALTH AND SAFETY PLAN APPROVAL/SIGNOFF FORM-FORM 23

Name: _____

WO#:

--

I understand, agree to, and will conform with the information set forth in this Health and Safety Plan (and attachments) and discussed in the personnel health and safety briefing(s).

Date _____

[illegible]

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TRAINING AND BRIEFING TOPICS-FORM 24

The following items will be covered at the site-specific training meeting, daily or periodically.

<input checked="" type="checkbox"/> Site characterization and analysis, Sec. 3.0, 29 CFR 1910.120 I	<input type="checkbox"/> Level A
<input checked="" type="checkbox"/> Physical hazards, HASP Form 07	<input type="checkbox"/> Level B
<input checked="" type="checkbox"/> Chemical hazards, HASP Form 04	<input type="checkbox"/> Level C
<input type="checkbox"/> Animal bites, stings, and poisonous plants	<input checked="" type="checkbox"/> Level D
<input type="checkbox"/> Etiologic (infectious) agents	<input checked="" type="checkbox"/> Monitoring, 29 CFR 1910.120 (h)
<input type="checkbox"/> Site control, 29 CFR 1910.120 d	<input type="checkbox"/> Decontamination, 29 CFR 1910.120 (k)
<input type="checkbox"/> Engineering controls and work practices, 29 CFR 1910.120 (g)	<input type="checkbox"/> Emergency response, 29 CFR 1910.120 (l)
<input type="checkbox"/> Heavy machinery	<input type="checkbox"/> Elements of an emergency response, 29 CFR 1910.120 (l)
<input type="checkbox"/> Forklift	<input type="checkbox"/> Procedures for handling site emergency incidents, 29 CFR 1910.120 (l)
<input checked="" type="checkbox"/> Backhoe	<input type="checkbox"/> Off-site emergency response, 29 CFR 1910.120 (l)
<input checked="" type="checkbox"/> Equipment	<input type="checkbox"/> Handling drums and containers, 29 CFR 1910.120 (j)
<input type="checkbox"/> Tools	<input type="checkbox"/> Opening drums and containers
<input type="checkbox"/> Ladder, 29 CFR 1910.27 (d)/29 CFR 1926	<input checked="" type="checkbox"/> Electrical material handling equipment
<input type="checkbox"/> Overhead and underground utilities	<input type="checkbox"/> Radioactive waste
<input type="checkbox"/> Scaffolds	<input type="checkbox"/> Shock-sensitive waste
<input type="checkbox"/> Structural integrity	<input type="checkbox"/> Laboratory waste packs
<input type="checkbox"/> Unguarded openings - wall, floor, ceilings	<input type="checkbox"/> Sampling drums and containers
<input type="checkbox"/> Pressurized air cylinders	<input type="checkbox"/> Shipping and transport, 49 CFR 172.101, IATA
<input type="checkbox"/> Personal protective equipment, 29 CFR 1910.120 (g); 29 CFR 1910.134	<input type="checkbox"/> Tank and vault procedures
<input type="checkbox"/> Respiratory protection, 29 CFR 1910.120 (g); ANSI Z88.2	<input type="checkbox"/> Illumination, 29 CFR 1910.120 (m)
<input type="checkbox"/>	<input type="checkbox"/> Sanitation, 29 CFR 1910.120 (n)
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

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HEALTH AND SAFETY EVALUATION- 1 CHEMICAL HAZARDS-FORM 25

Hazardous Substance/Tasks	Physical Properties	Normal Physical State	State At Site/Proj. Temp.	Characteristics	Exposure Limits	Route(s) of Exposure/ Symptoms	Monitoring Instruments/ Ionization Potential + % Response
	<input type="checkbox"/> Explosive <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Reactive <input type="checkbox"/> Water Reactive <input type="checkbox"/> Oxidizer <input type="checkbox"/> Radioactive <input type="checkbox"/> Other	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas	pH: _____ FP: _____ LEL: _____ UEL: _____ Auto. Ig.: _____ BP: _____ MP: _____ Sp. Gr.: _____ Vap. D.: _____ Vap. P.: _____ H ₂ O Sol.: _____ Other: _____	<input type="checkbox"/> CA _____ <input type="checkbox"/> PEL _____ <input type="checkbox"/> TLV _____ <input type="checkbox"/> IDLH _____ <input type="checkbox"/> Only toxicological data available <input type="checkbox"/> Other: _____	<input type="checkbox"/> Inhalation <input type="checkbox"/> Ingestion <input type="checkbox"/> Skin Absorption <input type="checkbox"/> Contact <input type="checkbox"/> Direct Penetration <input type="checkbox"/> Other: _____ _____ Symptoms: _____	<input type="checkbox"/> HNu <input type="checkbox"/> 11.7 eV <input type="checkbox"/> 10.2 eV <input type="checkbox"/> OVM <input type="checkbox"/> 10.0/10.6 eV <input type="checkbox"/> 11.8 eV <input type="checkbox"/> CGI <input type="checkbox"/> OVA <input type="checkbox"/> _____ IP: % Response:
CAS No:		Incompatible With:					
Synonyms:							

Form 26 – Attachment B – Material Safety Data Sheets (MSDSs)

Insert Material Safety Data Sheets (MSDSs) here.

Please reduce your browser font size for better viewing and printing.

MSDS

Material Safety Data Sheet

from: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-898-6666

Outside U.S. and Canada
Chemtec: 202-483-7618

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

LCONOX(R)

SDS Number: A2052 --- Effective Date: 02/21/00

Product Identification

Synonyms: Proprietary blend of sodium linear alkylaryl sulfonate, alcohol sulfate, phosphates, and carbonates.

CAS No.: Not applicable.

Molecular Weight: Not applicable to mixtures.

Chemical Formula: Not applicable to mixtures.

Product Codes: A461

Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Alconox (R) proprietary detergent mixture	N/A	90 - 100%	Yes

Hazards Identification

Emergency Overview

CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO EYES AND RESPIRATORY TRACT.

J.T. Baker SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT

Storage Color Code: Orange (General Storage)

Potential Health Effects

Inhalation:

May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Ingestion:

May cause irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

Skin Contact:

No adverse effects expected.

Eye Contact:

May cause irritation, redness and pain.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

First Aid Measures

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Fire Fighting Measures

Fire:

Not expected to be a fire hazard.

Explosion:

No information found.

Fire Extinguishing Media:

Dry chemical, foam, water or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. When mixed with water, material foams profusely. Small amounts of residue may be flushed to sewer with plenty of water.

Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Moisture may cause material to cake. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for

the product.

Exposure Controls/Personal Protection

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL):

15 mg/m³ total dust, 5 mg/m³ respirable fraction for nuisance dusts.

- ACGIH Threshold Limit Value (TLV):

10 mg/m³ total dust containing no asbestos and < 1% crystalline silica for Particulates Not Otherwise Classified (PNOC).

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Physical and Chemical Properties

Appearance:

White powder interspersed with cream colored flakes.

Odor:

No information found.

Solubility:

Moderate (1-10%)

Specific Gravity:

No information found.

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

No information found.

Melting Point:

No information found.

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

9. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

No information found.

Conditions to Avoid:

No information found.

1. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Alconox (R) proprietary detergent mixture	No	No	None

2. Ecological Information

Environmental Fate:

This product is biodegradable.

Environmental Toxicity:

No information found.

3. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

4. Transport Information

Not regulated.

5. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
	Yes	No	No	No
Alconox (R) proprietary detergent mixture	Yes	No	No	No

-----\Chemical Inventory Status - Part 2\-----				
--Canada--				

Ingredient	Korea	DSL	NDSL	Phil.
Alconox (R) proprietary detergent mixture	No	No	Yes	No

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302- RQ	TPQ	-SARA 313- List	Chemical Catg.
Alconox (R) proprietary detergent mixture	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8 (d)
Alconox (R) proprietary detergent mixture	No	No	No

emical Weapons Convention: No TSCA 12(b): No CDTA: No
RA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
activity: No (Pure / Solid)

Australian Hazchem Code: No information found.

Poison Schedule: No information found.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

5. Other Information

NFPA Ratings: Health: 0 Flammability: 0 Reactivity: 0

Label Hazard Warning:

CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO EYES AND RESPIRATORY TRACT.

Label Precautions:

Avoid contact with eyes.

Keep container closed.

Use with adequate ventilation.

Avoid breathing dust.

Wash thoroughly after handling.

Label First Aid:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. In all cases, get medical attention.

Product Use:

Laboratory Reagent.

Revision Information:

MSDS Section(s) changed since last revision of document include: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16.

Disclaimer:

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Prepared by: Strategic Services Division
Phone Number: (314) 539-1600 (U.S.A.)

MATERIAL SAFETY DATA SHEET

Schaeffer Mfg. Company
1001 Barton Street
St. Louis, MO 63104

Emergency Telephone No.
(314) 865-4105 or
(800) 325-9962

SECTION 1 – PRODUCT INFORMATION

Chemical Family: Petroleum Hydrocarbons	Trade Name: #137 Diesel Treat 2000
Formula: Proprietary Mixture.	

SECTION 2 – HAZARDOUS INGREDIENTS

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES	CAS Number	%	Exposure Limits			
			TVL		PEL	
			ppm	mg/m ³	ppm	mg/m ³
Petroleum Distillate	68477-31-6	6-8		5		5
Anthracene	91-20-3	.86	10	52	10	50
Thiocyanomethylthio Benzothiazole	21564-17-6	<1	NE		NE	
Alkyl Aromatic Naphtha	64742-94-5	.2-1		5		5
Alkyl Hexyl Nitrate	27247-96-7	30-40	8			
Alkyl Naphthenic Distillate	64742-53-6	25-30		5		5
Asphalt	1330-20-7	.87	100	434	150	651

Section 3 – PHYSICAL DATA

Boiling Point:	300° F/148.8° C	Specific Gravity:	.9083
Vapor Pressure (mm, Hg):	<.1	% Volatile:	<15
Vapor Density (Air = 1):	Not Determined	Evaporation Rate: (=1)	Not Determined
Solubility in Water:	Disperses	pH:	Not Applicable
Appearance and Odor: Red color, slight aromatic odor.			

SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method) ° F/° C: 75° F/23.89° C PMCC	Flammability Limits UEL & LEL ----Not Determined
Extinguishing Media: Carbon dioxide foam, dry chemical foam, sand, earth, waterfog.	
Special Fire Fighting Procedures: For fires involving this material, do not enter any enclosed or confined space without protective equipment including self-contained breathing apparatus. Cool exposed containers with waterspray. Avoid breathing vapors.	
Usual Fire & Explosion Hazards: This product is flammable.	

SECTION 5 - REACTIVITY HAZARD DATA

Reactivity [X] STABLE [] UNSTABLE	Hazardous Decomposition [] WILL [X] WILL NOT OCCUR
Conditions to Avoid: High heat, high energy ignition sources	
Compatibility (Mat. to avoid): Strong oxidizing agents, amines, phenols, halogen compounds.	
Hazardous Decomposition Products: Oxides of carbon and nitrogen.	
Conditions to Avoid: None.	

SECTION 6 - HEALTH HAZARD DATA

Threshold Limit Value and Sources: None established.
Acute Effects of Overexposure:
Ingestion: Harmful or fatal if swallowed.
Eye Contact: Liquid contact produces severe irritation to the eyes.
Skin Contact: Prolonged and repeated contact with the skin can cause redness or severe irritation.
Inhalation: Inhalation of vapors can cause headache, dizziness, nausea, or decreased blood pressure.
CHRONIC EFFECTS OF OVEREXPOSURE: None currently known.
Emergency and First Aid Procedures:
Swallowing: If a large amount of this material is swallowed give a large amount of water to drink. Do not induce vomiting. Seek medical attention immediately.
Eye: Wash skin thoroughly with soap and water. Launder contaminated clothing.
Inhalation: Remove victim to fresh air. If breathing has stopped start artificial respiration immediately.
First Aid: Flush eyes with clear, cool, clean water for 15 minutes. Seek medical attention immediately

SECTION 7 – SPILL OR LEAK PROCEDURES

Environmental Impact: This material is not expected to present any environmental problems other than those associated with spills. If spilled into a watercourse, call the Coast Guard Toll Free No. 800-424-8802.

Procedures To Be Taken If Material Is Released or Spilled: Eliminate all sources of ignition. Absorb spills with absorbent y. Ventilate confined spaces. Keep out of sewers and watercourses.

Waste Disposal Method: Dispose of at an approved waste or disposal site facility in accordance with all applicable federal, state and local laws and regulations.

SECTION 8 – SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required under ordinary conditions of use.

Ventilation: No special requirement under ordinary conditions of use and with adequate ventilation.

Eye Protection: Goggles or face shield.

Protective Clothing: Use air-supplied mask if used in confined space.

SECTION 9 – SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling and Storage: Do not store near heat, spark, flame or strong oxidizers. Keep containers closed when not in use.

Special Comments: Avoid breathing vapors. Avoid prolonged or repeated skin contact. Remove contaminated shoes and clothing. Throw away shoes. Launder clothing before reuse. Wash thoroughly with soap and water after use.

SECTION 10 – ADDITIONAL HEALTH AND TOXICOLOGICAL DATA

HMIS & NFPA Ratings: Health = 2 Fire = 3 Reactivity = 0

Contaminated clothing should be disposed of properly and/or decontaminated before reuse. Under no circumstance should vomiting be induced. Vomiting can cause aspiration of the product into the lungs. If aspirated into the lungs, chemical pneumonia, which may cause death in spite of treatment with oxygen and antibiotics, may result.

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

This product does not contain any levels of the chemicals that are listed as potential cancer causing agents as determined by the National Toxicology Program's Annual Reports, OSHA's Subpart Z list, the International Agency for Cancer Research's monographs or the State of California's Proposition 65 list.

For SARA Title III Information, see below.

SARA TITLE III INFORMATION

Section 302/304 Extremely Hazardous

Component

Section 102(a) CERCLA Hazardous

Substance

Component

Toluene

Phthalene

Benzene

Product RQ for Stationary Sources Release Regulatory.

See Section 311 Hazardous Categorization

CAS#	%	RQ (lbs.)	RQ (gal.)*	
CAS#	%	RQ (lbs.)	RQ (gals.)	
100-41-4	.02-.2	1000	66,138-661,376	
91-20-3	.86	100	1528	
1330-20-7	.87	1000	15,204	
Regulatory.				
Acute	Chronic	Fire	Pressure	Reactivity
X	X	X		

Section 313 Toxic Chemical

Component

Toluene

Phthalene

Benzene

CAS#	%
100-41-4	.02-.2
91-20-3	.86
1330-20-7	.87

Although the information and recommendations set forth herein (hereafter referred to as information) are presented in good faith and believed to be accurate and factual as of the date hereof, Schaeffer Mfg. Company makes no representation as to the completeness or accuracy thereof. Information is supplied upon the condition that the person receiving the same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Schaeffer Mfg. Company be responsible for damages of any natures whatsoever resulting from the use or reliance upon information. **No representation or warranty, either expressed or implied, of merchantability or fitness for a particular purpose is made with respect to information of the product to which the information refers.**

**Form 27 – Attachment C – Safety Procedures/Field Operating
Procedures (FLD Ops)**

Insert the appropriate Safety Procedures/Field Operating Procedures here.

Refer to WESTON SOP Manual on site -

SITE-SPECIFIC HAZARD COMMUNICATION PROGRAM-FORM 28

Location-Specific Hazard Communication Program/Checklist

To ensure an understanding of and compliance with the Hazard Communication Standard, WESTON will use this checklist/document (or similar document) in conjunction with the WESTON Written Hazard Communication Program as a means of meeting site- or location-specific requirements.

While responsibility for activities within this document reference the WESTON Safety Officer (SO), it is the responsibility of all personnel to effect compliance. Responsibilities under various conditions can be found within the WESTON Written Hazard Communication Program.

To ensure that information about the dangers of all hazardous chemicals used by WESTON are known by all affected employees, the following Hazard Communication Program has been established. All affected personnel will participate in the Hazard Communication Program. This written program, as well as WESTON's Corporate Hazard Communication Program, will be available for review by any employee, employee representative, representative of OSHA, NIOSH, or any affected employer/employee on a multi-employer site.

- ☐ Site or other location name/address: _____
- ☐ Site/Project/Location Manager: _____
- ☐ Site/Location Safety Officer: _____
- ☐ List of chemicals compiled, format: ☐ HASP ☐ Other: _____
- ☐ Location of MSDS files: _____
- ☐ Training conducted by: Name: _____ Date: _____
- ☐ Indicate format of training documentation: ☐ Field Log: ☐ Other: _____
- ☐ Client briefing conducted regarding hazard communication: _____
- ☐ If multi-employer site (client, subcontractor, agency, etc.), indicate name of affected companies: _____
- ☐ Other employer(s) notified of chemicals, labeling, and MSDS information: _____
- ☐ Has WESTON been notified of other employer's or client's hazard communication program(s), as necessary? ☐ Yes ☐ No

List of Hazardous Chemicals

A list of known hazardous chemicals used by WESTON personnel must be prepared and attached to this document or placed in a centrally identified location with the MSDSs. Further information on each chemical may be obtained by reviewing the appropriate MSDS. The list will be arranged to enable cross-reference with the MSDS file and the label on the container. The SO or Location Manager is responsible for ensuring the chemical listing remains up-to-date.

Container Labeling

The WESTON SO will verify that all containers received from the chemical manufacturer, importer, or distributor for use on-site are clearly labeled.

The SO is responsible for ensuring that labels are placed where required and for comparing MSDSs and other information with label information to ensure correctness.

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Material Safety Data Sheets (MSDSs)

FORM 28

The SO is responsible for establishing and monitoring WESTON's MSDS program for the location. The SO will ensure that procedures are developed to obtain the necessary MSDSs and will review incoming MSDSs for new or significant health and safety information. He/she will see that any new information is passed on to the affected employees. If an MSDS is not received at the time of initial shipment, the SO will call the manufacturer and have an MSDS delivered for that product in accordance with the requirements of WESTON's Written Hazard Communication Program.

A log for, and copies of, MSDSs for all hazardous chemicals in use will be kept in the MSDS folder at a location known to all site workers. MSDSs will be readily available to all employees during each work shift. If an MSDS is not available, immediately contact the WESTON SO or the designated alternate. When a revised MSDS is received, the SO will immediately replace the old MSDS.

Employee Training and Information

The SO is responsible for the WESTON site-specific personnel training program. The SO will ensure that all program elements specified below are supplied to all affected employees.

At the time of initial assignment for employees to the work site, or whenever a new hazard is introduced into the work area, employees will attend a health and safety meeting or briefing that includes the information indicated below.

- Hazardous chemicals present at the work site.
- Physical and health risks of the hazardous chemicals.
- The signs and symptoms of overexposure.
- Procedures to follow if employees are overexposed to hazardous chemicals.
- Location of the MSDS file and Written Hazard Communication Program.
- How to determine the presence or release of hazardous chemicals in the employee's work area.
- How to read labels and review MSDSs to obtain hazard information.
- Steps WESTON has taken to reduce or prevent exposure to hazardous chemicals.
- How to reduce or prevent exposure to hazardous chemicals through the use of controls procedures, work practices, and personal protective equipment.
- Hazardous, nonroutine tasks to be performed (if any).
- Chemicals within unlabeled piping (if any).

Hazardous Nonroutine Tasks

When employees are required to perform hazardous nonroutine tasks, the affected employee(s) will be given information by the SO about the hazardous chemicals he or she may use during such activity. This information will include specific chemical hazards, protective and safety measures the employee can use, and steps WESTON is using to reduce the hazards. These steps include, but are not limited to, ventilation, respirators, presence of another employee, and emergency procedures.

Chemicals in Unlabeled Pipes

Work activities may be performed by employees in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employee will contact the SO, at which time information as to the chemical(s) in the pipes, potential hazards of the chemicals or the process involved, and the safety precautions that should be taken will be determined and presented.

Multi-Employer Work Sites

It is the responsibility of the SO to provide other employers with information about hazardous chemicals imported by WESTON to which their employees may be exposed, along with suggested safety precautions. It is also the responsibility of the SO and the Site Manager to obtain information about hazardous chemicals used by other employers to which WESTON

employees may be exposed. WESTON's chemical listing will be made available to other employers, as requested. MSDSs will be available for viewing, as necessary. The location, format, and/or procedures for accessing MSDS information must be relayed to affected employees.

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SITE AIR MONITORING PROGRAM-FORM 29

Field Data Sheets

Location:

% LEL	% O ₂	PID (units)	FID (units)	Aerosol Monitor (mg/m ³)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				Detector Tube(s)				
Sound Levels (dBA)		Illumination	pH	Other	Other	Other	Other	Other

Location:

% LEL	% O ₂	PID (units)	FID (units)	Aerosol Monitor (mg/m ³)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				Detector Tube(s)				
Sound Levels (dBA)		Illumination	pH	Other	Other	Other	Other	Other

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AIR MONITORING/SAMPLING DATA LOG-FORM 30

Client:	W.O. No.:	Sample No.:
Address:	Sampled By:	Date:

Employee and Location Information

Employee Name:	Employee No.:	Job Title:
Respirator <input type="checkbox"/> APR <input type="checkbox"/> ½ Mask <input type="checkbox"/> Full Face <input type="checkbox"/> PAPR <input type="checkbox"/> ½ Mask <input type="checkbox"/> Full Face <input type="checkbox"/> Hood <input type="checkbox"/> SAR <input type="checkbox"/> ½ Mask <input type="checkbox"/> Full Face <input type="checkbox"/> Hood <input type="checkbox"/> SCBA	Manufacturer:	Cartridge Type:
PPE: <input type="checkbox"/> Hard Hat <input type="checkbox"/> HPD <input type="checkbox"/> Gloves <input type="checkbox"/> Safety Shoes <input type="checkbox"/> Coveralls <input type="checkbox"/> Other:		

Sampling Data

Sampling Type: <input type="checkbox"/> Personal <input type="checkbox"/> TWA <input type="checkbox"/> STEL <input type="checkbox"/> Area <input type="checkbox"/> Source <input type="checkbox"/> Full Shift <input type="checkbox"/> Partial Shift <input type="checkbox"/> Grab	Media:	Pump Type/Serial No.: /
Calibrator/Serial No.: /	Pre-Calibration: 1. 2. 3. avg-pre:	Post-Calibration: 1. 2. 3. avg-post:
Start Time:	Restart Time:	Restart Time:
1st Stop Time:	2nd Stop Time:	3rd Stop Time:
Avg. Flowrate:		% Change:
Volume:		
Multiple Samples for this TWA: <input type="checkbox"/> Yes <input type="checkbox"/> No	Multiple Chemical Exposures: <input type="checkbox"/> Yes <input type="checkbox"/> No	Exposure Time: <input type="checkbox"/> Normal <input type="checkbox"/> Worst Case

Sampling Conditions

Weather Conditions:	Temp:	R.H.:	B.P.:	Other:
Engineering Controls:				

Substances Evaluated

Substance	Result	Substance	Result	Substance	Result

Observations and Comments

QA by: **Date**